

ATTACHMENT A

REMARKS

The further interview held with Examiner Boddie and Supervisory Examiner Awad on March 30, 2007, is gratefully acknowledged. Again, the courtesy and cooperative spirit shown by the Examiners is appreciated. It was agreed during the interview that if the independent claims were to be amended to include limitations concerning the wide viewing angle of the electro-optical sensing system as well as operating by detecting reflected light, this would overcome the current rejection. Both independent claim 1 and independent claim 54 have been amended to include corresponding limitations and thus it is believed that these claims and the claims dependent thereon are allowable.

Turning to the Office Action, and considering the matters raised in the same order as raised, claim 22 has been objected to as including a phrase which is "incorrect grammatically." Claim 22 has been amended to overcome this rejection. Claims 71 and 76 have been also objected to. The dependencies of these two claims has been changed in the manner suggested by the Examiner. The assistance of the Examiner in this respect is appreciated.

Claim 13 has been rejected under 35 U.S.C. § 112, second paragraph, as being "indefinite." Claim 13 has been rewritten to address the various issues raised by the Examiner and is now believed to be fully in accordance with the requirements of the second paragraph of 35 U.S.C. § 112.

Claims 1, 3-10, 12, 20, 22-24, 28, 30, 33, 40, 41, 46, 54, 58-72, 79, 81-83, 85, 86, 89, 91, 92, and 94-100 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujimoto in view of Jaeger (5,572,239). The remaining claims have

also been rejected on prior art with the Fujimoto and Jaeger references as the base references. As set forth above, independent claims 1 and 54 have been amended in order to overcome this rejection and are now believed to be in condition for allowance.

Turning briefly to the references relied on in the rejection of claims 1 and 54, the Fujimoto patent has been discussed in some detail in previous responses and relates to a rear projection display screen system including electro-optical sensing means located behind the screen. The Fujimoto patent is specifically concerned with touch sensing, and, as admitted in a prior Office Action, does not disclose a plurality of control details mounted in front of a screen nor a sensing system for sensing the position of the physical control details.

The newly cited Jaeger patent relates to an operator interface with an integrated display screen wherein a plurality of knobs are mounted in front of a display screen as shown in Figures 18A-18C and Figure 21 referenced by the Examiner. A separate electro-optical sensor is provided for each of the control knobs as shown, for example, in Figure 2. As shown in Figure 21 and described in column 17, lines 50-61 (both referenced by the Examiner), each sensing arrangement includes a light tube 163 and a coding disk 167 including alternating opaque and transparent areas 168 and 169 so that turning of knob 153 causes a mirror 172 to return pulses of light to tube 163. The light pulses are ultimately directed towards detector 174 which generates "a series of electrical pulses the number of which is indicative of the amount of moving" of the corresponding knob. The detectors are mounted close to the back of screen 36 on a driver board 41 as shown in Figure 2.

It is respectfully submitted that the claims, as amended, clearly define over the Fujimoto and Jaeger references. For example, in Jaeger, individual sensors are used for each separate knob and each sensor has a very narrow field of view defined by the corresponding light tube 63 or 163. Further, it is respectfully submitted that it simply would not be obvious to combine the teachings of the two references in that the detectors of Jaeger (e.g., detectors 18, 21, 24, and 31 of Figure 2) are located directly in back of the screen in close relationship thereto (so that the length of the light path is minimized) and, as illustrated, would simply block the light if an attempt were made to use rear projection to project light onto all of the knobs. Thus, the approaches taken in the Fujimoto and Jaeger references are quite different and it is respectfully submitted that it would not be obvious to combine these approaches given the actual teachings of the two references.

Applicant has made an earnest attempt to place this application in condition for allowance based on the discussions at the interview. As was discussed at the interview, if the Examiner believes that a problem or problems still remain, the Examiner is respectfully urged to telephone the undersigned so that any such problems can be resolved.

Allowance of the application in its present form is respectfully solicited.

END REMARKS